# ISTANBUL SUSTAINABLE URBAN MOBILITY PLAN

September 2021







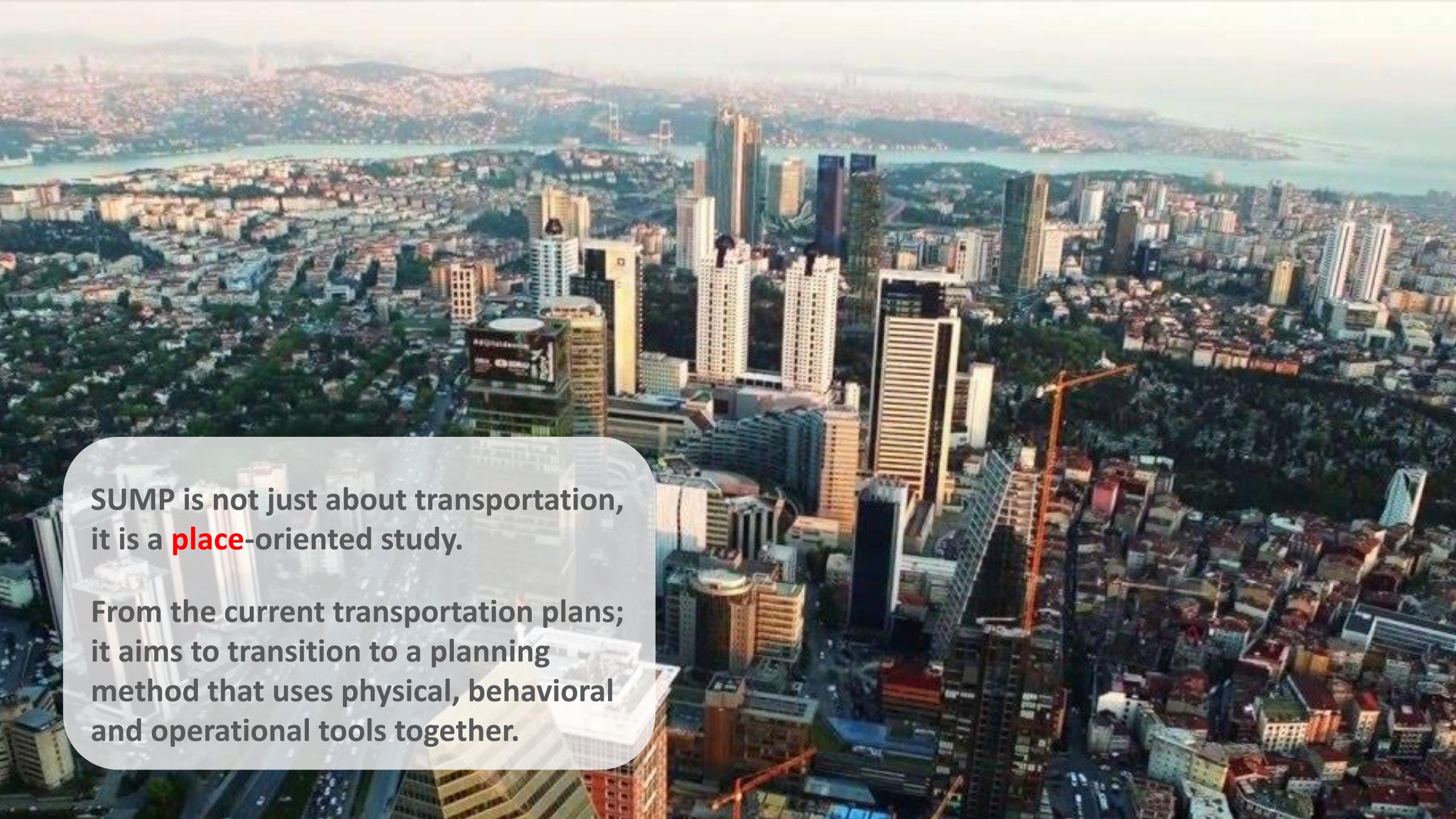
## What is Sustainable Urban Mobility Plan (SUMP)?

A Sustainable Urban Mobility Plan is a strategic plan designed to satisfy the **mobility** needs of people and businesses in cities and their surroundings for a better **quality of life**.

It builds on existing planning practices and takes due consideration of integration, participation and evaluation principles.



Source: SUMP Guidance: EC, 2014



### SUMP Focus Points

- Sustainability
- Mobility
- Active modes
- Stakeholder Engagement
- Integration
- Vision development
- Social Inclusion
- Transportation for 'Everyone'



### İSTANBUL

## Sustainable Urban Mobility Plan (SUMP)

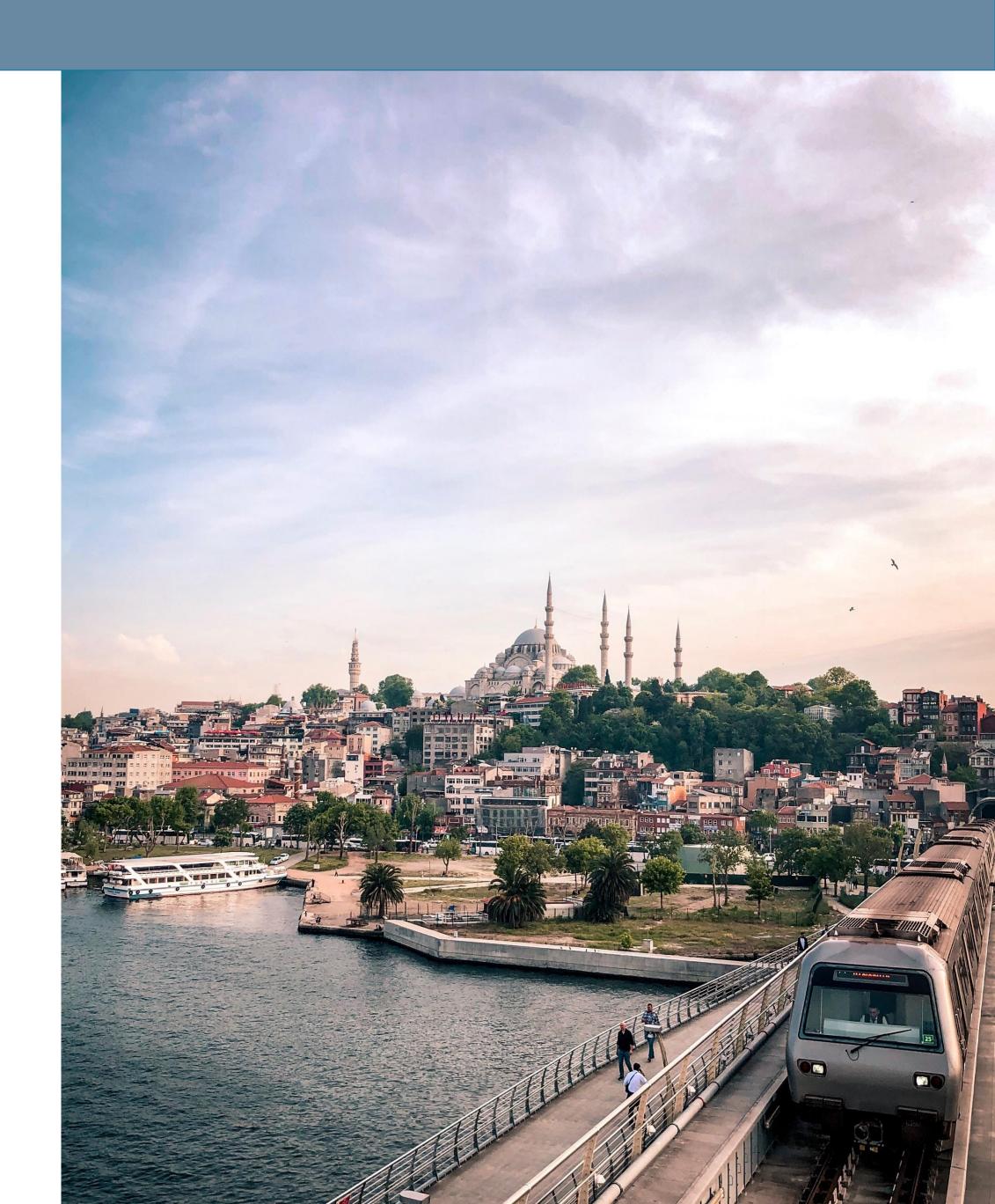
Within the scope of the «GLOBAL FUTURE CITIES PROGRAMME" developed by the Foreign Commonwealth and Development Office together with the United Nations Habitat Organization; The project has been ongoing since September 2019.











### Istanbul SUMP Project Stakeholders



### Programme Management

United Kingdom Government Fund



## Strategy and Knowledge Sharing

United Nations
Human
Settlements
Programme



#### Primary Beneficiary

Istanbul Metropolitan Municipality

#### **ARUP**

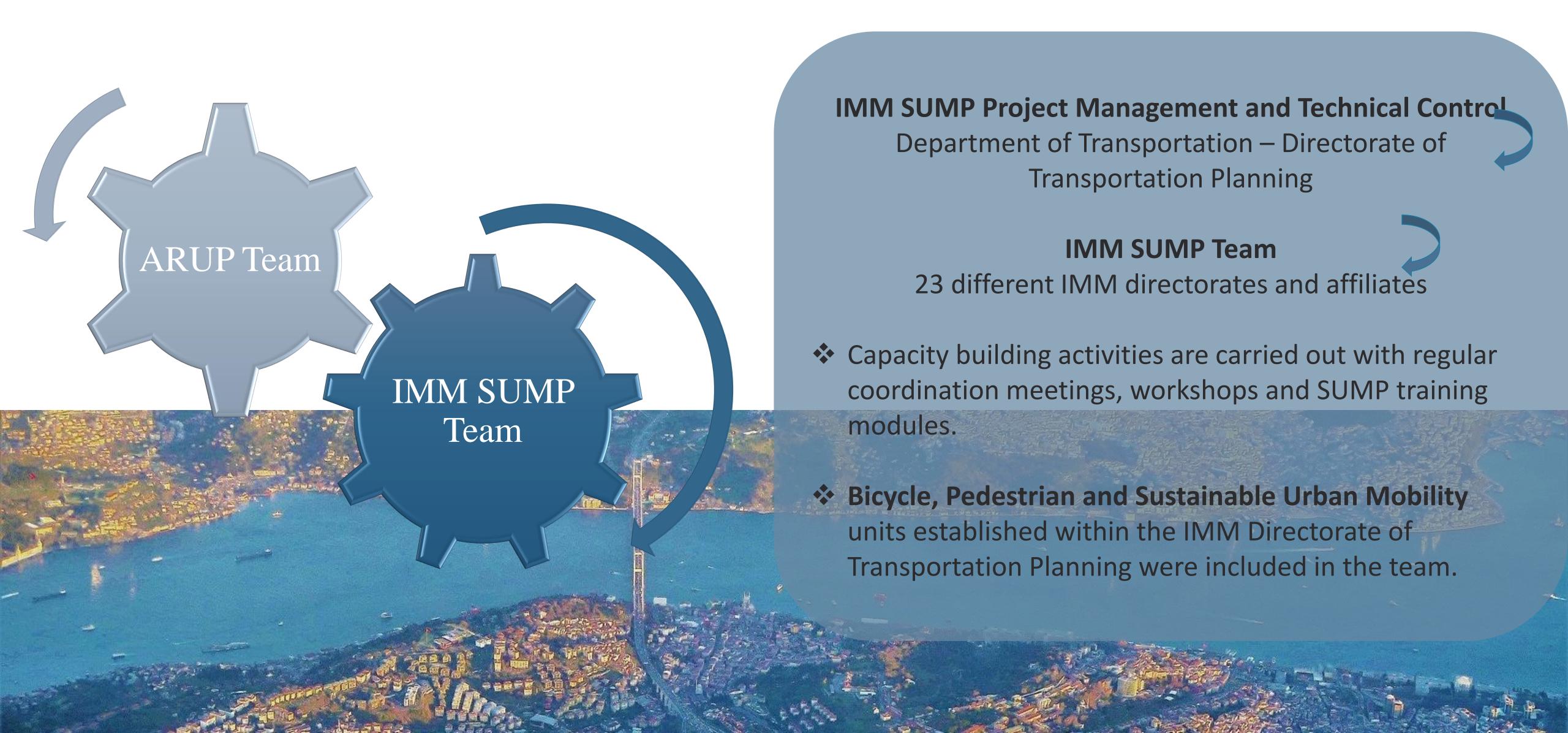
### **Delivery Partner**

Arup

**Beneficiary Target Stakeholders** 

**Everyone living** in ISTANBUL

### Istanbul SUMP Project Team



### **İstanbul SUMP**

Istanbul SUMP is the first «Sustainable Urban Mobility Plan (SUMP)» in Turkey.

The first SUMP study made for a "mega city" with population over 15 million.

It has adapted and achieved continuity throughout the pandemic. It has been added to the European Commission SUMP literature with pandemic phase studies.

### Main Components of Istanbul SUMP

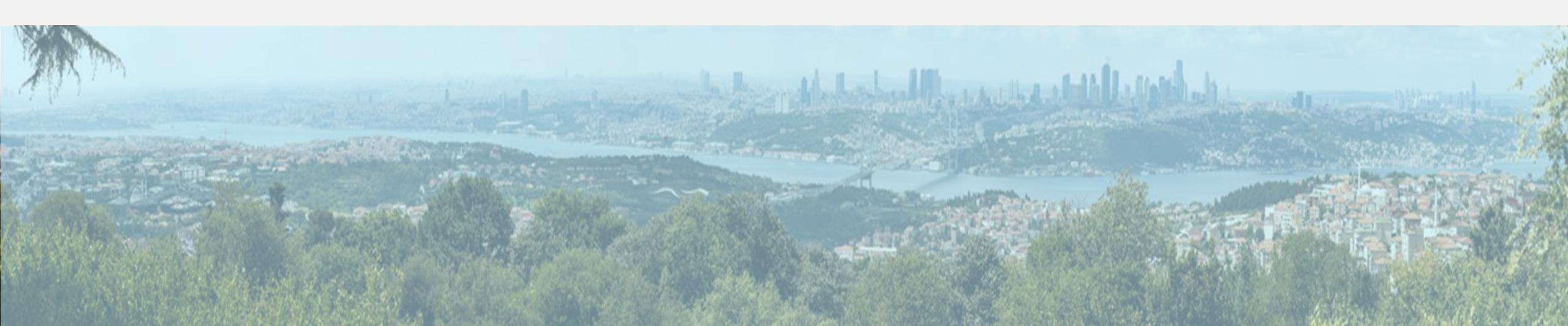
#### **PRINCIPLES**

People centric
Holistic
Participation and transparency
Functional urban area

#### **SCOPE**

Quality of life
Social inclusion
Mobility and accessibility

#### **STAKEHOLDERS**



### Principals of Istanbul SUMP

• Sustainable mobility

More accessibility with sustainable modes

• Integrating all transport modes
For example, multi-modal transportation solutions

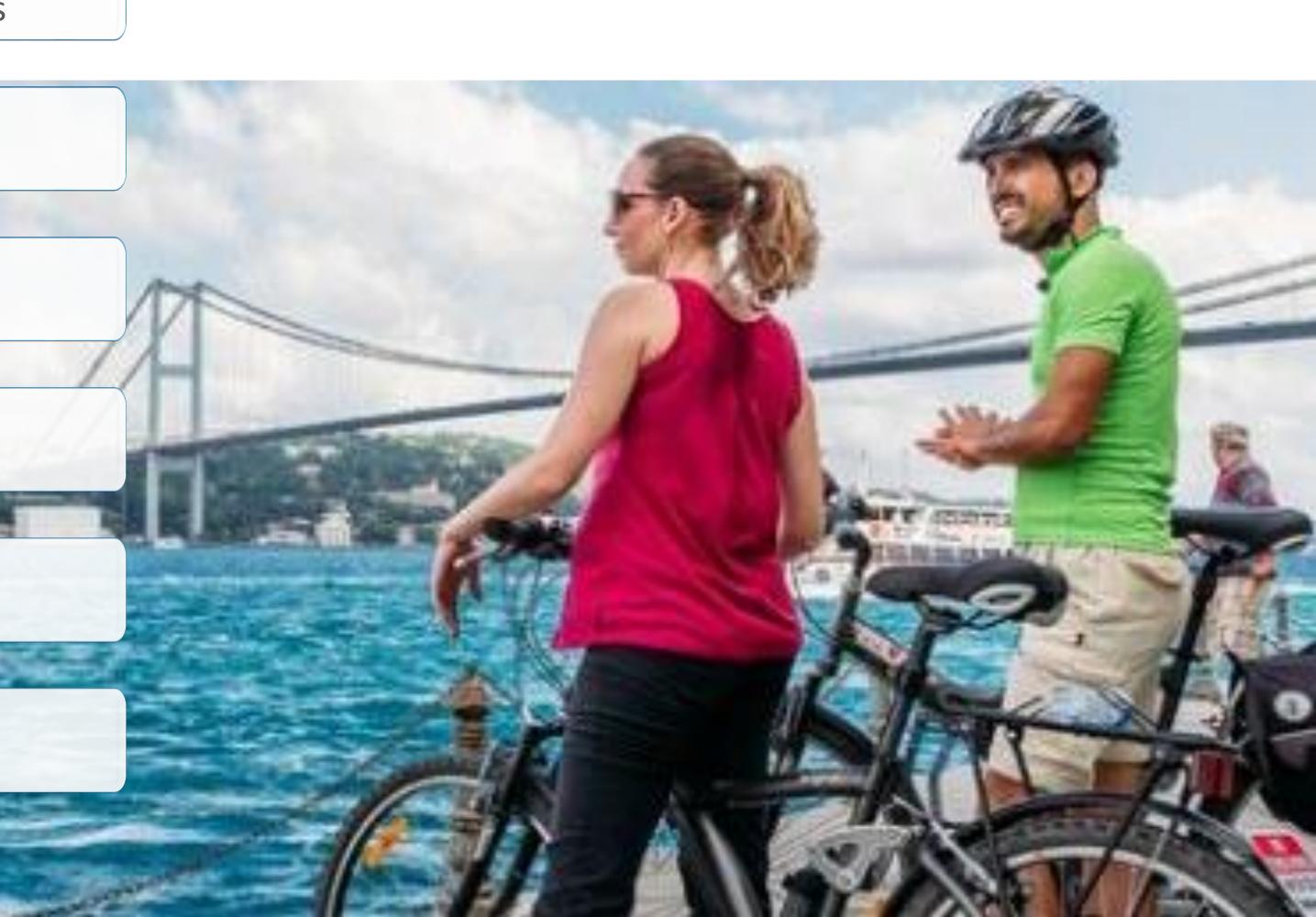
Promoting non-motorized transport
 Walking and cycling

Cooperation between institutional units
 Capacity building

Involving citizens and stakeholders
 Underrepresented groups

Long-term vision and clear implementation plan
 Core Projects

Monitoring and evaluation
 Making the project implementation safe



### How do we reach targets?

#### **INCLUDE PARTIES**

- Stakeholder Engagement and Communication Methodology
- Social Inclusion

#### **IMPROVE LOCAL** CONDITIONS

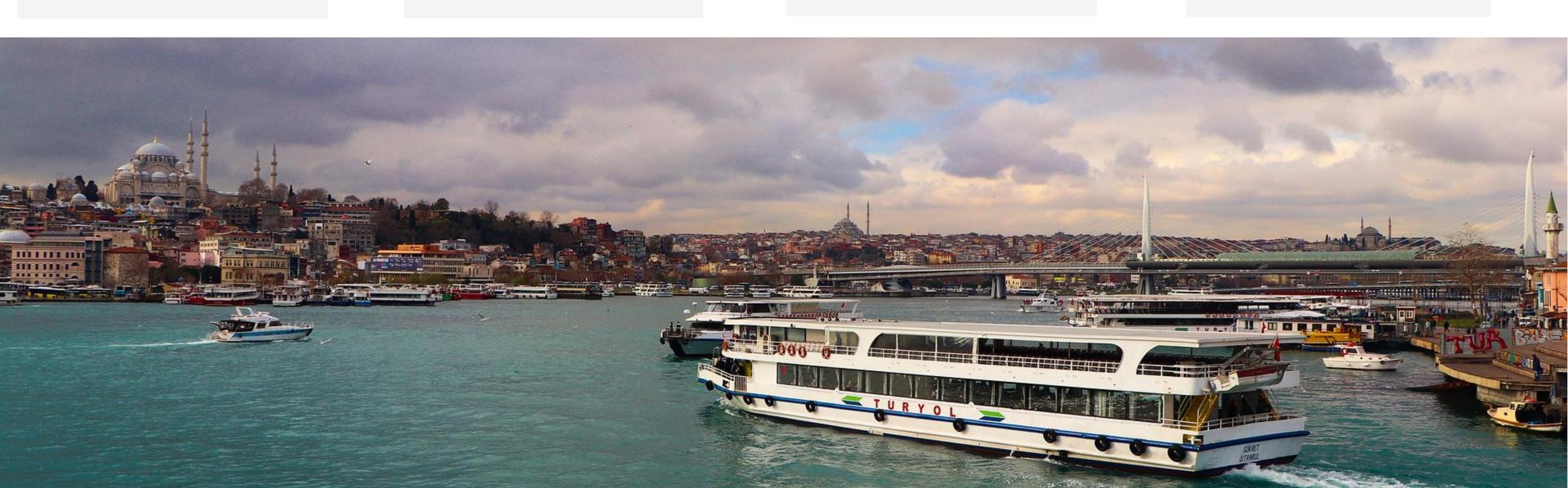
- Governance Plan
- Capacity Development

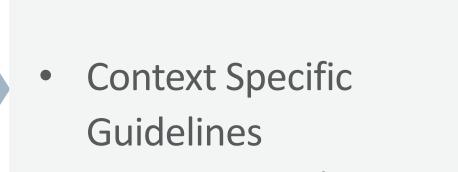
#### **DEVELOP SUMP**

- Strategy Development and Scenarios
- Vision, Objectives and
- Policy Measures

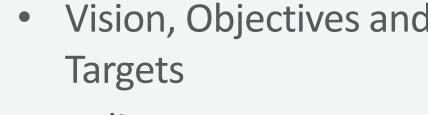
#### **DEFINE CLEAR** ROAD MAP

- **SUMP Implementation** Plan
- Monitoring and **Evaluation**



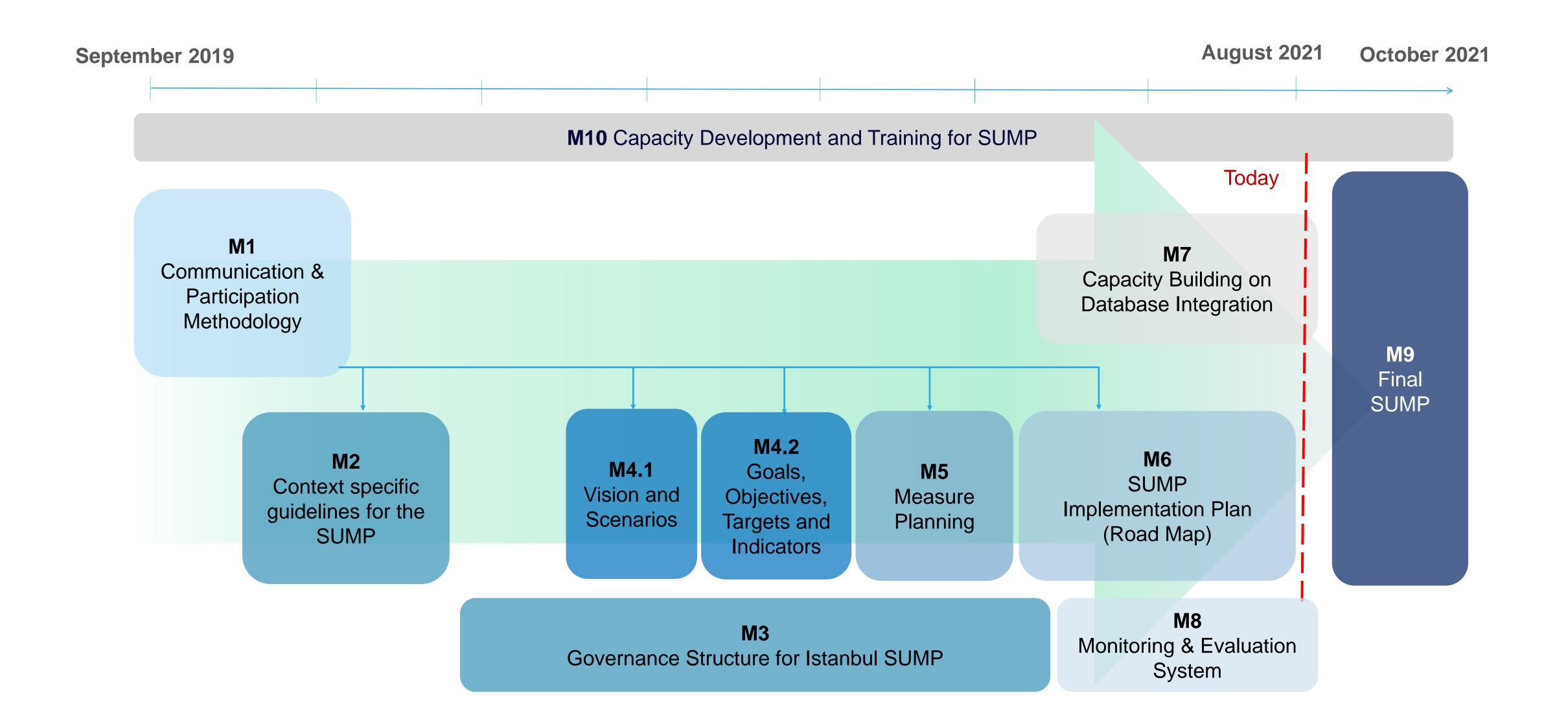








### Istanbul SUMP Timeline



### Engagement to reach the Targets

In 4 different phases of the project;

### total of 22 workshops 220 stakeholders

- ✓ Future of Istanbul Transport
- Istanbul SUMP: Vision, Objectives, **Indicators and Targets**
- Istanbul SUMP Measures Planning
- Istanbul SUMP Implementation Plan Core Projects

All reached at online events,

- ✓ Government,
- ✓ Municipalities,
- ✓ District municipalities,
- ✓ NGOs,
- ✓ IMM,
- ✓ Private sector,
- ✓ Academicians and
- ✓ Representatives of operators

In the underrepresented groups, 9673

### representation

In principle with Gender Equality and Social Inclusion 73% representation from Underrepresented Groups was achieved.

#### **IMM SUMP Team**

The IMM SUMP Team was established, which includes participants from 23 different IMM directorates and affiliates.









### Gender Equality and Social Inclusion

#### **AIM**

- > Participation of underrepresented groups in decision processes and urban life
- Contributing to the United Nations' Sustainable Development Goals (SDGs) with the motto "LEAVE NOONE BEHIND"

#### 8 underrepresented groups

Women, youth/children, 65+ group citizens, individuals with disabilities, immigrants, visitors/tourists/business travelers, low-income groups/unemployed.

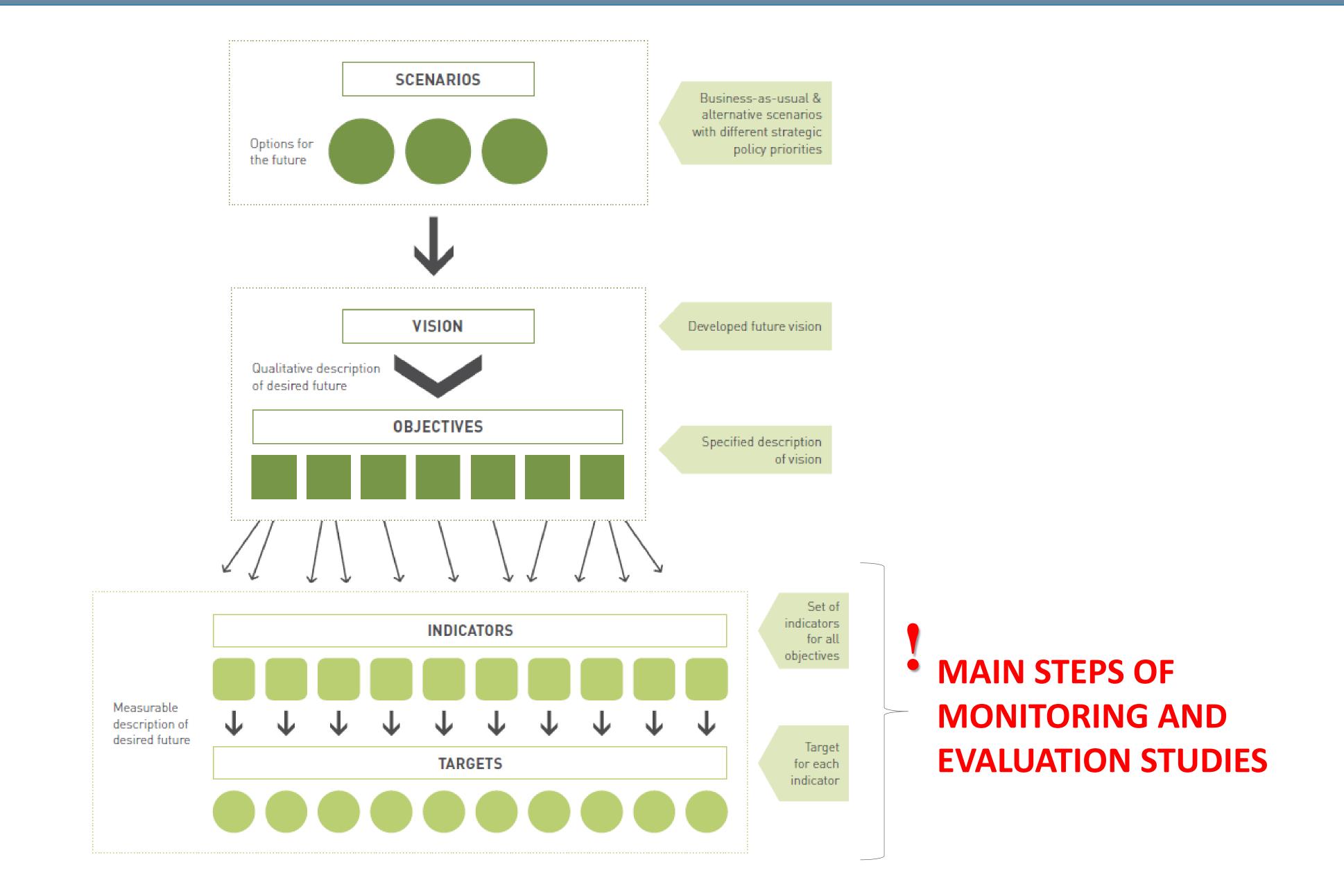
Especially during the Covid-19 pandemic period, it has become more evident how vulnerable groups are affected by transportation.

#### Additional groups in Istanbul SUMP,

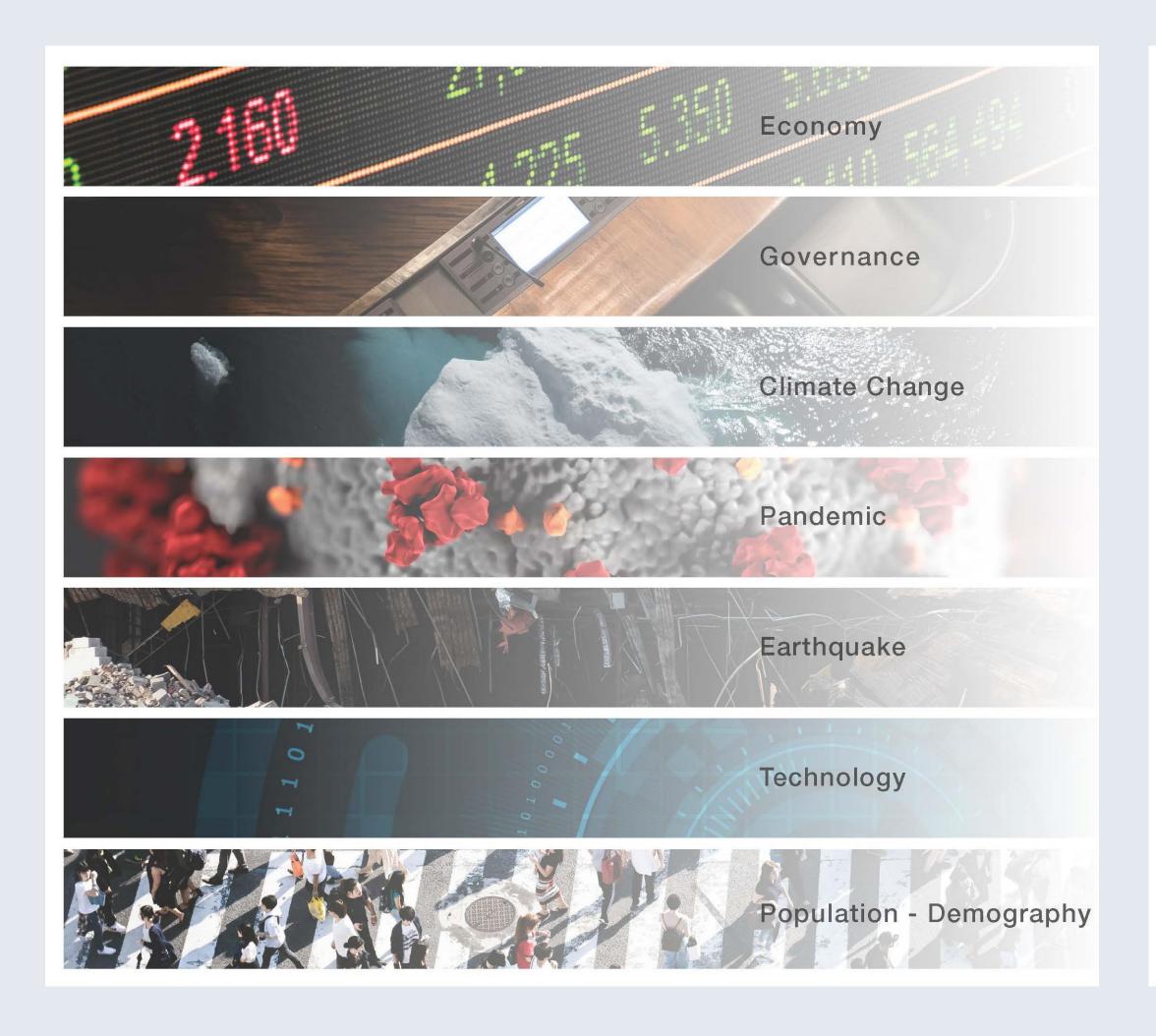
People living in peripheral areas, night shift workers, people with disabilities (learning disabilities, mental / physical people with disabilities), those with chronic conditions, refugees and asylum seekers, ethnic minorities, parents / dependents and LGBT + individuals



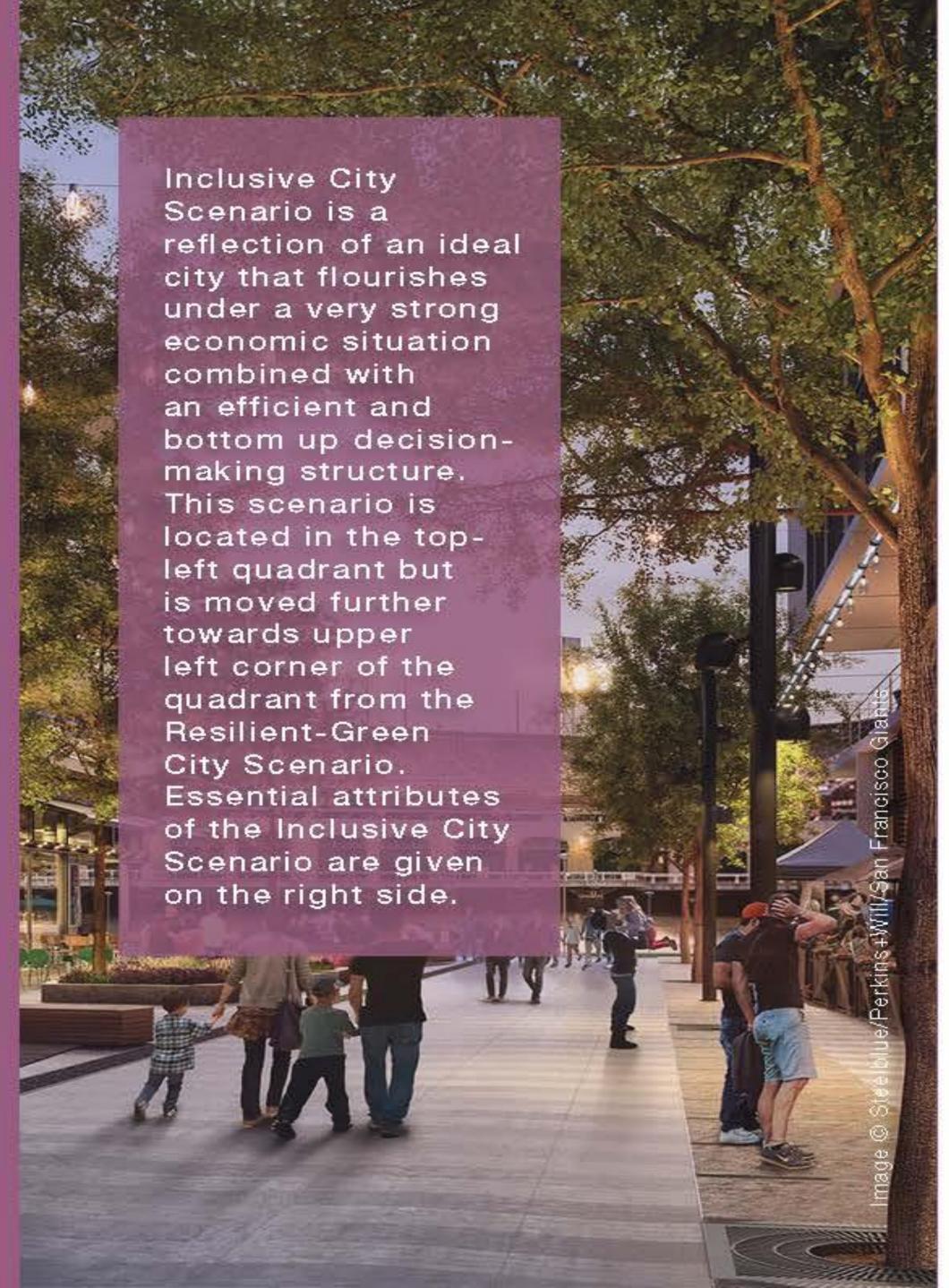
### Scenarios, Vision, Objectives, Indicators and Targets



### **External Factors and Istanbul SUMP Scenarios**









#### MOBILITY TRENDS

- Reduced mobility needs
- · Almost completely car-free
- Emphasis on active transport modes
- Slow city
- Advanced and high quality shared mobility supported by the local government
- Increased accessibility for all



#### LAND USE

- Compact city
- City of short distances
- Connected neighbourhoods
- Parking will only be available off-street
- Car-parks replaced by urban farms or public spaces



#### ECONOMY

 Higher prosperity, rebalanced economic development of regions in the country, higher household income



#### FUNDING

 Higher and better targeted funding with a special focus on zero-carbon, small scale horticulture, local production/consumption, etc.



#### ENERGY

 Focus on alternative, clean energy resources, fossil fuel use is becoming a thing of the past



#### TECHNOLOGY UPTAKE

 High but better controlled technology uptake, streamlined innovation, positive disruption, smart technology is everywhere and helps to integrate diverse systems



#### GOVERNANCE

 Community organized small scale production and distribution



#### SOCIAL TRENDS

- High level of social inclusion
- Reduced inequalities through accommodating different needs of all under-represented groups
- High level of awareness on issues regarding sustainability



#### CLIMATE CHANGE

 High level of resilience for climate change



#### PANDEMICS

 High level of resilience for pandemics (more use of private transport means)



#### RESILIENCE

Population downsized and some people moved to other cities





### Objectives, Indicators and Targets

No	Objectives	Number of Indicators
1	Have an accessible, affordable, integrated and inclusive transportation system	12
2	Have an environmentally sustainable transportation system	5
3	Have an economically sustainable and resilient transportation system	5
4	Improve the safety and security of transport and travelling	6
5	Reduce traffic volumes, congestion and automobile dependency	5
6	Stimulate the modal shift to public transport	9
7	Stimulate the modal shift to active modes (walking and cycling)	14
8	Have a transportation system that promotes compact and polycentric development	5
9	Have an efficient city logistics system with minimal negative impact	3
	TOTAL	64



Core Objectives		Core Indicators	Draft Targets (2040)			
		Per capita well-to-wheel GHG emissions by all urban area passenger and freight transport modes.	60% reduction- Zero emission			
Horro on anticonmentally systemable	3	Share of electric, hybrid, hydrogen vehicles used in the PT fleet	50%-100%			
Have an environmentally sustainable transportation system	4	Share of electric, hybrid, hydrogen cars and taxis	40%-60%			
	5	Percentage of population hindered by urban transport noise, based on hindrance factors for noise exposure data of population by noise bands	Total affected over 65 DB decrease by 25- 100%, total affected over 55 DB decrease by 10-50%			



### Istanbul SUMP Implementation Plan / Road Map

#### **Transition to Low Carbon**





#### Seamless Transfer and Integration

#### **Policies**

Low Emission Zones

Decarbonisation of the Public Transport Fleet and Vehicles

Walking

Cycling

Healthy Streets

Micro-Mobility

#### **Core Projects**

Low Emission Zone

Metrobus Decarbonisation

Decarbonisation of the Public Transport Bus Fleet

Cycle Feeder Routes

Pedestrian Routes

Traffic Calming

Junction improvements for pedestrians and cyclists

8 projects

E-bikes and e-scooters

### Istanbul SUMP Implementation Plan / Road Map

### **Seamless Transfer and Integration**





#### Seamless Transfer and Integration

#### **Policies**

Extension of railway lines
Improving accessibility to the rail and BRT networks
Minibus transformation
Improvement of the other modes

#### **Core Projects**

Rail network extension Istanbulkart extension to include minibus operations Istanbul Network Management Control Centre Bus lanes

Minibus feeder routes

Passenger sea transport – fleet renewal

Extension of Transfer Centres

Extension of Real-Time Passenger Information and Open Data

Bus Service/Frequency Improvement Programme

Park and Ride Facilities



10 projects

### Istanbul SUMP Implementation Plan / Road Map

### **Reducing Congestion**





#### **Reducing Congestion**

#### **Policies**

Parking and Road Usage Regulation Mobility Management Urban Freight Demand Management Road Network Management

#### **Core Projects**

Congestion Charging
Extension of Parking Regulation
Residents' Parking Permit System
Introduction of an Automated Payment System for Parking
Reorganisation of Parking Regulation Enforcement
Implementation of Institutional Mobility Management
Construction Concentration Centres
Neighbourhood Mobility Service Centres

8 projects

### Project Cards — Example

#### **Low Emission Zone**

"Low Emission Zones (LEZs) are areas where the vehicle operators have the option to pay to enter the LEZ and thus charges are set carefully in order to have a deterrence effect and encourage upgrading to newer less polluting vehicles. They are aimed at improving air quality by defining an area where access by some polluting vehicles is restricted or deterred. They tend to be focused on city and town centres, where land use is dense, traffic is heavy and population exposure is high (See Map on the next page)."

#### Contribution to SUMP Objectives

















#### Problem description

Rising Air Pollution (NO2 and Particular Matter, PM10, PM 2.5)

Sector/ transport mode	Theme	E
Road transport	Theme 1: Transition to Low Carbon	

#### Impact

Improved levels of air quality with health benefits (up to 2 years' reduction in life expectancy at birth, child lung development, risk to asthma sufferers, earlier onset dementia)

#### **Preparatory Action and Projects**

- . A feasibility study to understand the Pilot area air quality problems in order to define area for consideration to be included with an LEZ and to define application of LEZ emissions standards and vehicles, to include an emissions levy and charging regime.
- Set up air quality monitoring scheme for LEZ areas.
- A study to look at legislation to allow IMM to collect revenue.
- Review of IMM's institutional capacity in line with the Istanbul Climate Change Plan.
- Consideration for the LEZ to follow EU vehicle regulations.

#### Relation with other projects and measures

Could be considered in tandem with congestion charge, as per London, where the congestion charging and current ULEZ areas are the same. Strong link needed with positive complementary benefits as with the congestion charging project. In the longer term linked into the Istanbul Transport Coordination Centre.

#### Constraints and risks

Commercial impacts may create opposition for example from road hauliers and residents. Boundary effects as traffic moves to routes just outside zone boundary. Discriminates against less well off. Complex to implement, may involve street closures to prevent re-routing. Very extensive public consultation and planning required.

Beneficiaries	Owner/responsible	Third parties involved					
opulation, especially groups living within he LEZ area.	IMM or dedicated new unit	Public, public transport and freight vehicle operators					
Current status	Preparation period	Implementation period					
	For Pilot Schemes: Detailed feasibility and consultation 4 years (2021-2024)	4 years (2025-2029)					
stimated budget (million)	Financing source						
Capital cost is TRY 18.2 million/perimeter cm. Revenue can cover operating costs. nitial implementation is expected to cost billion TRY	To be discussed.Costs could be shared with charging scheme.	the implementation of the Congestion					

### Project Fact Sheets - Example

#### **Low Emission Zone**

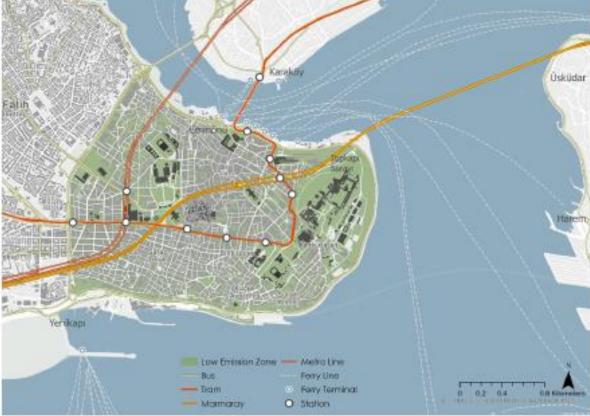
#### Project Implementation Plan

The introduction of an LEZ in Eminönü would be a large exercise requiring significant resources in terms of feasibility, consultation, implementation, operation, monitoring and enforcement. However, the reward, in terms of improved air quality, could be substantial, subject to the results of a detailed appraisal and monitoring exercise. Running the LEZ in tandem with the proposed congestion charging project, both of which covers the same scheme area, may prove to a benefit in terms of costs and programming.

A potential Project Implementation Plan and its potential expansion is shown in table on the right.

It should be noted that the procurement period is projected to last 2 years, based upon experience from other similar projects, obviously should the project scheme be less sophisticated and run in parallel with the congestion charging project then timescales could be less than that indicated. In addition, should the pilot project prove successful and gain public support then it could be extended should the roll out of electric vehicles not progress as quickly as proposed within the SUMP.





### Implementation Plan

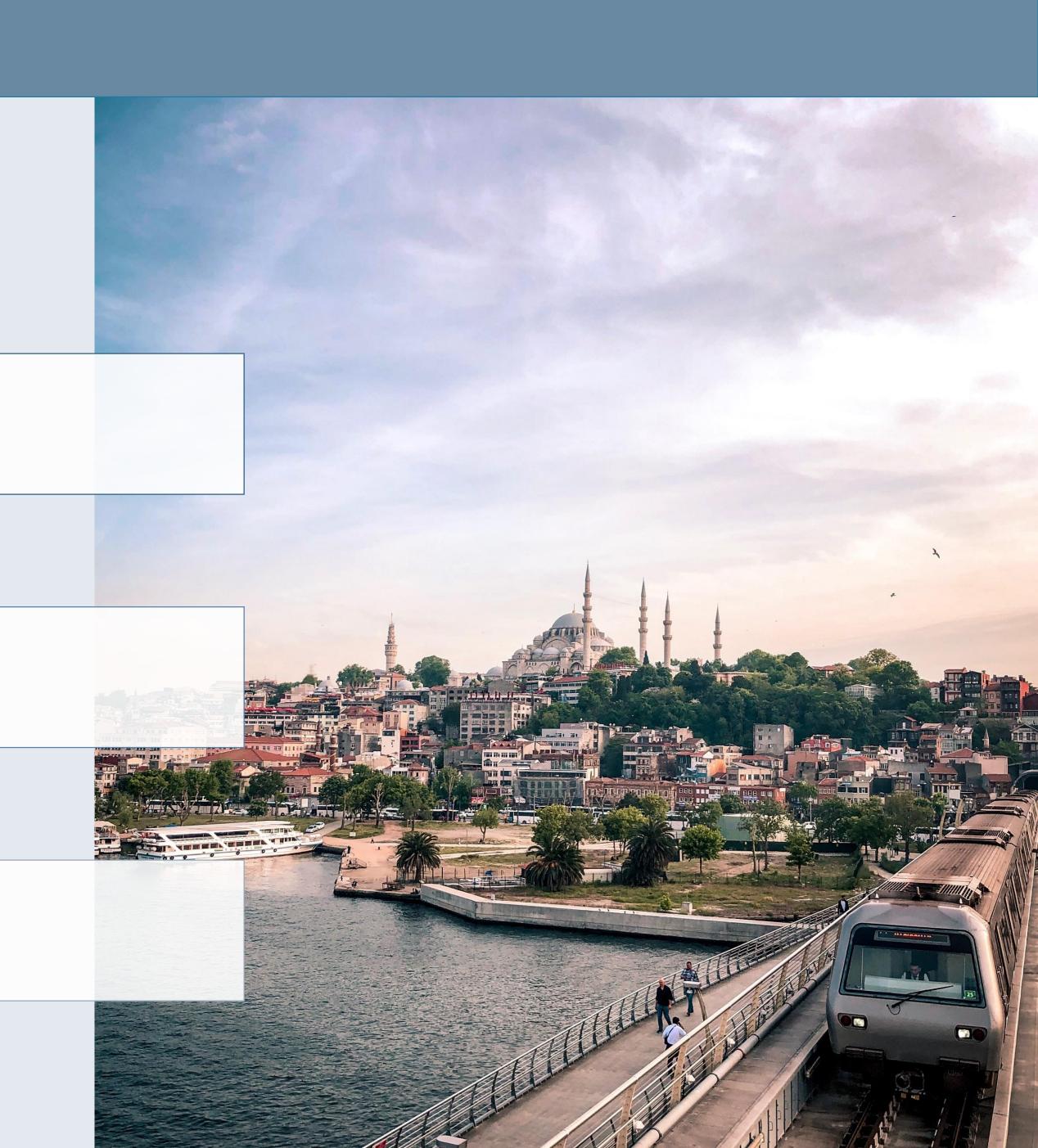
No	Project Name	Priority	2 0 2 2	2 0 2 3	2 0 2 4	2 0 2 5	2 0 2 6	2 0 2 7	2 0 2 8	2 0 2 9	2 0 3 0	2 2 0 0 3 3 1 5	2 2 0 0 3 4 6 0
8	Extension of parking regulation	Must-Do											
21	Implementation of Institutional Mobility Management	Must-Do											
10	Automated payment system for parking	Must-Do											
5	Istanbul Network Management Control Centre	Must-Do											
11	Reorganisation of parking regulation enforcement	Must-Do											
9	Residents parking permit system	Must-Do											
19	Junction improvements for pedestrians and cyclists	High											
7	Metrobus Decarbonization	High											
13	Minibus feeder routes (gross contract)	High											
1	Rail network extension (not committed/planned)	High											
15	Extension of Transfer Centres	High											
17	Traffic calming	High											
12	Bus lanes	Medium											
3	Congestion Charging Zone(s)	Medium											
6	Decarbonisation of the Public Transport Bus Fleet	Medium											
22	Construction material concentration centres	Medium											
16	Cycle Feeder Routes (Strategic Cycling network)	Medium											
20	Real-Time Passenger Information and open data	Medium											
18	Pedestrian routes (Strategic Walking Network)	Medium											
2	Low Emission Zone(s)	Low											
14	Passenger sea transport - fleet renewal	Low											
26	Bus service improvement programme	Next											
24	E-bikes and e-scooters	Next											
4	Istanbul Card extension to include minibus operations	Next											
25	Neighbourhood Mobility Service Centres	Next											
23	Park and ride	Next											

### Expected RESULTS

Vision, scenarios, objectives, targets and policy measures created by the collaborative work of all relevant stakeholders

An inclusive, innovative and participatory Sustainable Urban Mobility Plan focused on the needs of all segments of society

Along with the plan, guidelines for implementing and monitoring the plan



### İstanbul SUMP



### Lessons Learnt

Stakeholder analysis needs to be done well.

It is important to have **continuing participation** and support in the study of SUMP.

The work should be **owned by** all stakeholders from the beginning of the process.

It is necessary for the SUMP to communicate with **underrepresented groups** and to protect the interests of all segments.

It is of great importance to introduce SUMP to the citizens through communication channels.

### Lessons Learnt

It is essential that the identified projects are **feasible** and address the most **prioritised** issues. Therefore, the project priorities of local governments should be adapted.

It is essential to determine the legal framework to ensure the sustainability of the plan.

**The SUMP Team** should ensure that the plan is followed by the monitoring and evaluation process and is a sustainable plan.

Considering the principles of **Sustainable Urban Mobility** of the Transport Master Plan studies; Contrary to traditional methods, it should be developed with the participation of **our citizens and stakeholders**, should be people-oriented, not automobile, and should fully comply with all other important sectors such as health, environment and energy.

For this reason, our main takeaways are those the Transportation Master Plan studies turn into a Sustainable Urban Mobility Plan and a hybrid model is used in the transition period..

